

Title (en)

Thin-film multilayered electrode, high-frequency resonator, and high-frequency transmission line

Title (de)

Dünnschicht-Mehrschichtelektrode, Hochfrequenzresonator, und Hochfrequenzübertragungsleitung

Title (fr)

Electrode multicouche à couches minces, résonateur haute fréquence, et ligne de transmission haute fréquence

Publication

**EP 0786822 B1 20020925 (EN)**

Application

**EP 97101024 A 19970123**

Priority

JP 906196 A 19960123

Abstract (en)

[origin: EP0786822A2] An inexpensive and reliable thin-film multilayered electrode which is formable on a dielectric substrate such as a ceramic substrate. A thin-film multilayered electrode having thin-film conductors and thin-film dielectrics formed by alternately layering on a dielectric substrate with a predetermined dielectric constant, wherein the dielectric constant for each of the thin-film dielectrics is selected such that the electromagnetic field created in the dielectric substrate and the electromagnetic field created in each of the thin-film dielectrics are substantially in phase with each other when the thin-film multilayered electrode is used at a predetermined frequency, and the film thickness of each of the thin-film dielectrics falls between 0.2  $\mu\text{m}$  and 2  $\mu\text{m}$ ; and the film thickness of each of the thin-film conductors, other than a thin-film conductor formed most distant from the dielectric substrate, is thinner than the skin depth at the predetermined frequency. <IMAGE>

IPC 1-7

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IPC 8 full level

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